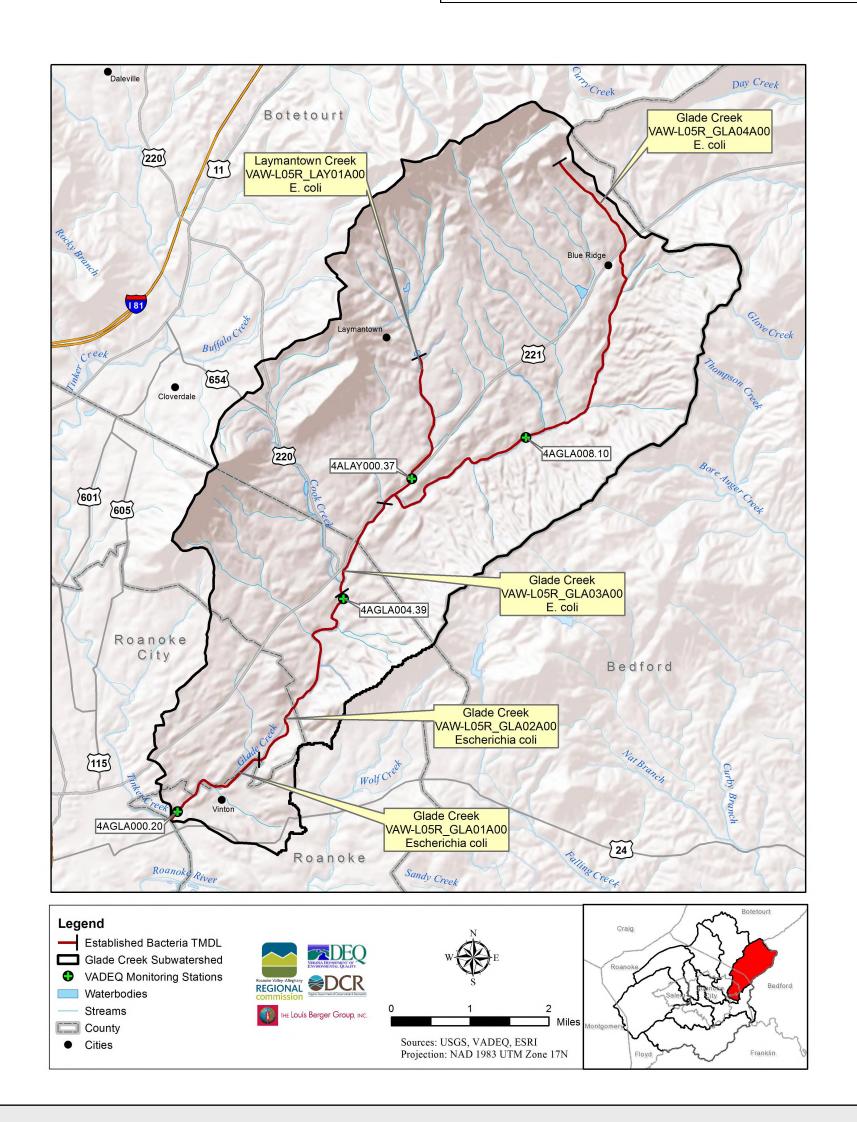




Glade/Laymantown Creek Subwatershed







Botetourt Roanoke Bedford Roanoke NEGAN DEPARTMENT OF Q Glade Creek Subwatershed Developed, Medium Intensity County Developed, Open Space Emergent Herbaceuous Wetlands REGIONAL Waterbodies Evergreen Forest Streams **Landuse Categories** Mixed Forest Barren Land Cultivated Crops Deciduous Forest Shrub/Scrub Sources: USGS, VADEQ, ESRI Developed, High Intensity

Impairment Summary

Assessment Unit	Stream Name	Length (miles)	Boundaries	Cause
VAW- L05R_GLA01A00	Glade Creek	1.56	Glade Creek mainstem from the Glade Creek mouth on Tinker Creek upstream to the Berkley Rd. crossing.	Escherichia coli
VAW- L05R_GLA02A00	Glade Creek	2.84	Glade Creek mainstem from the Berkley Rd. Crossing on upstream to the confluence of Cook Creek.	Escherichia coli
VAW- L05R_GLA03A00	Glade Creek	1.33	Glade Creek mainstem from the Cook Creek mouth upstream to the confluence of Coyner Spring Branch.	Escherichia coli
VAW- L05R_GLA04A00	Glade Creek	6.86	Glade Creek mainstem from the mouth of Coyner Spring Branch upstream to its headwaters.	Escherichia coli
VAW- L05R_LAY01A00	Laymantown Creek	2.07	Laymantown Creek mainstem from an outlet of a small pond downstream to the Laymantown Creek mouth on Glade Creek.	Escherichia coli

Land Use Distribution (NLCD 2006)

	Area		
Land Use Category	Acres	Percent	
Developed	7,118.3	33.7%	
Agriculture	4,086.5	19.3%	
Forest	9,904.1	46.8%	
Water/Wetlands	21.4	0.1%	
Other	11.0	0.1%	
Total	21,141.3	100.0%	

Existing and Allocated Bacteria Loads

Land Use/Source	Total Ann Loads (billi forming u	Percent Reduction	
	Existing Load	Allocation Load	(%)
Land Based Non-point	Loau	Load	
Developed	658,627	26,685	95.9%
Agriculture	1,164,795	47,474	95.9%
Forest	1,854,470	161,497	91.3%
Water/Wetlands	451	40	91.1%
Other	2,045	82	96.0%
Direct Non-point			
Livestock Direct	4,625	0	100.0%
Wildlife Direct	77,420	24,000	69.0%
Failed Septic, Straight Pipes and Sewer Overflows	39,710	0	100.0%
Point Source	0	0	0.0%
MS4s	1,980,448	80,239	95.9%
Total	5,782,590	340,017	94.1%

Existing Best Management Practices Agricultural and Stormwater

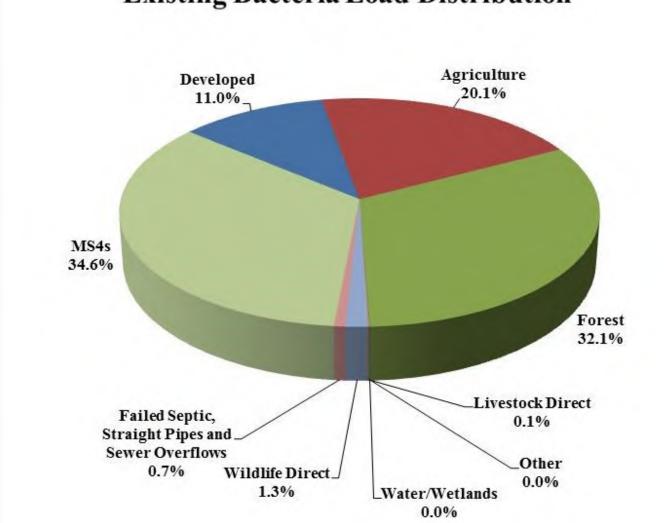
Agricultural Best Management Practice	Count	Area Treated	Streamlength Pro- tected (ft)
Alternative Water System	6	242.5	N/A
Stream Exclusion With Grazing Land Management	1	30	1,800

Stormwater Best Management Practice	Count	Reported Area Treated* (acres)
Bioretention	2	1.9
Detention Basin	48	711.6
Extended Detention Pond	1	No Data
Infiltration	11	No Data
Manufactured Unit	15	No Data
Retention Pond	7	23.9
Underground Detention	21	8.9
Underground Infiltration	1	No Data
Water Quality/Grassed Swale	1	1.43

^{*}Not all Best Management Practices reported area treated

The municipalities are in the process of creating Best Management Practices inventories, so not all Best Management Practices present in the watershed may be reported.

Existing Bacteria Load Distribution



Potential Implementation Actions to Reduce Bacteria

- . Low Impact Development Stormwater Controls
- . Livestock Exclusion from Streams
- . Grazing Land Management
- . Riparian Buffer Creation/Expansion
- . Septic System Repair/Replacement